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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,488	01/16/2002	Shen-Chun Kuo	CD01351	7695

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SCHERING-PLOUGH CORPORATION  
PATENT DEPARTMENT (K-6-1, 1990)  
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KENILWORTH, NJ 07033-0530

EXAMINER

BALASUBRAMANIAN, VENKATARAMAN

ART UNIT	PAPER NUMBER
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1624

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/050,488	<b>Applicant(s)</b> KUO ET AL.	
	<b>Examiner</b> Venkataraman Balasubramanian	<b>Art Unit</b> 1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-12 and 14-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/17/03</u> . | 6) <input type="checkbox"/> Other: ____  |

### **DETAILED ACTION**

Applicants' response, which included affirmation of election/restriction, cancellation of claims 25-30, filed on 11/10/2003, is made of record.

Claims 1-24 are pending.

Applicants' traversal of restriction requirement is noted but not persuasive for reasons of record. Contrary to applicants' urging, searching all the intermediates of the remaining group would be a serious search burden and there is no reason to believe that searching the elected invention would lead to the remaining inventions. This very clear from references cited in the Information Disclosure statement which shows most of the references devoid of triazine core of instant elected core. Hence the restriction is proper and made Final.

Applicants are again reminded that the instant claims still have non-elected subject matter and that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### ***Information Disclosure Statement***

References cited in the Information Disclosure Statement (paper # 2) are made of record.

In view of applicants' response, the following apply:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-8, 10-12, and 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baig et al. GB 2 125 402 in view of Chabala et al. EP 0 113,570 for reasons of record. To repeat:

Baig et al. discloses a compound of formula I shown on figure I and process for making the compound, which includes the process claimed herein. See Figure I on page 19 and note the definition of various variable groups. Particularly note when  $R^2$  is  $CONR^7R^8$  the compounds taught and the process for making includes instant process and compound. Especially note  $R^7$  can be hydrogen or an alkyl, while  $R^8$  can be hydrogen, alkyl or optionally substituted benzyl, which qualify as a protecting group. See examples 1-28 shown on pages 4-10.

Instant claims differ from the reference in reciting the Pg" as protecting group while the reference includes them as groups whose presence also results in the claimed activity. In addition, when  $R^7$  and  $R^8$  are hydrogen, the compound is taught to be active. It is known in the art and hence omitted in the specification such groups can be easily removed. For example the benzyl group can be removed by hydrogenolysis.

Instant claims also require a process of making the imidazole intermediate.

The secondary reference Chabala et al. teaches a process for making the said imidazole compounds. See formula shown on page 2 and note the definition of  $R_1$ ,  $R_2$ ,  $R_3$ , and  $R_4$  groups. See reaction scheme 2 on page 9 and examples 1-4 and Table 1 for various imidazole compounds made.

Thus one having ordinary skill in the art at the time of the invention was made would have been motivated to combine both the primary reference, secondary reference, and what is known in the prior art and employ the process taught by these prior art to the starting materials and reactants of the instant invention and expect to obtain the desired product because he would have expected the analogous starting

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materials and reactants react similarly. It has been held that application of an old process to an analogous material to obtain a result consistent with the teachings of the art would have been obvious to one having ordinary skill. Note In re Kerkhoven 205 USPQ 1069.

Applicants' traversal to overcome this rejection was not persuasive. The following apply.

Contrary to applicants' urging, examiner has clearly analyzed the Graham factors one and two as seen from the above rejection.

Applicants argue that the primary reference Baig et al does not, as noted by the Examiner, noted that the instant claims differ from Baig in reciting the Pg" as protecting groups. The fact that Baig et al. teaches the said compounds with groups, which are by definition protecting groups, meet the requirement of instant process claims. The fact that Baig et al. tested these compounds for activity does not negate that he made the compounds by the process taught in the reference.

The difference is Baig et al. does not teach the intermediate imidazole preparation as it is known in the literature. The secondary reference Chabala clearly meets that requirement.

Applicants' argument that Chabala teaches only imidazole compound with a benzyl group on the nitrogen is incorrect. On page 11, example 1, Chabala shows use of the imidazole for making the substituted imidazole.

Hence, this rejection is deemed as proper and is maintained.

***Allowable Subject Matter***

Claims 9,13 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable, barring finding of any additional prior art, if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Said claims would be allowed since specific limitation embraced in these claims are not taught or suggested by the art of record or from a search in the relevant art area.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571) 272-0662. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Supervisory Patent Examiner (SPE) of the art unit 1624 is

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Mukund Shah whose telephone number is (571) 272-0674. If Applicants are unable to reach Mukund Shah within 24-hour period, they may contact James O. Wilson, Acting-SPE of art unit 1624 at 571-272-0661.

The fax phone number for the organization where this application or proceeding is assigned (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

VB

V. Balasubramanian

03/04/2004

  
RICHARD L. RAYMOND  
ACTING SPE  
ART UNIT 1624